

# PDCA project teaching mode

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**Abstract:** as a type of education, the essential characteristics of vocational education are the combination of education and training, the combination of morality and technology, and its education quality directly affects the quality of economic and social development. The combination of project teaching method and PDCA quality management cycle is applied to practical teaching, which is complementary and complementary, and promotes the continuous improvement of the quality of skill education.

**Key words:** project teaching method; PDCA quality management cycle; Vocational education; High quality development

As a type of education, the essential characteristics of vocational education are the combination of education and training, the combination of morality and technology, and its development quality directly affects the quality of economic and social development. The high-quality development of modern industry is inseparable from high-quality vocational education . The high quality of vocational education needs to be implemented in the main position of education and teaching - classroom. With the popularization and application of project teaching method in many vocational colleges, during the practice of skill training and competition preparation, our school found that the PDCA project teaching mode combining project teaching method and PDCA quality management cycle can better integrate and complement each other, which not only radiates the vitality and vitality of teaching, but also ensures the better implementation of the combination of vocational education and training, It is a very suitable teaching mode to promote the high-quality development of vocational education.

## 1. Project teaching method and PDCA quality management cycle

### 1.1 Project teaching method

#### 1. theoretical basis

Project teaching method originated from European labor education thought. It was widely used in the work study education in Europe in the 18th and 19th centuries and the cooperative education in the United States. By the middle and late 20th century, the teaching method was relatively mature, and its educational thought has become an important educational theory.

The guiding ideology of project teaching method is based on constructivist learning theory. Constructivist learning theory emphasizes that students are the center, “situation”, “cooperation”, “conversation” and “meaning construction” are its four elements. “Situation” refers to the diversified learning situation based on the social and cultural background; “Cooperation” refers to actively creating a cooperative learning environment and cultivating students’ cooperative spirit; “Conversation” refers to interpersonal cooperative activities in groups and teams, which can better stimulate students’ learning initiative; “Meaning construction” refers to the process in which learners solve problems through cooperative learning in a certain situation, so as to realize the active construction of knowledge meaning.

#### 2. teaching ideas

Since the 1990s, countries around the world have been changing their educational concepts and paying attention to the change of students’ learning methods. Their central idea is to change the traditional single and passive learning methods in school education, and advocate the construction of open, diversified and student-centered teaching methods.

The project teaching method takes the “project” as the carrier. Under the guidance of teachers, relatively independent projects or tasks are handed over to student groups, who are independently responsible for collecting and analyzing information, specifying scheme plans, project implementation and final evaluation. Through participating in the whole process of the project, students can understand and master the basic requirements in each link .

#### 3. general process of project teaching method

In the practical application of project teaching method, it generally includes five steps: designing and determining the project, grouping students and making plans, implementing plans for autonomous learning and exploration in each group, project inspection of stage communication and summary, and project evaluation of results submission.

#### 4. the role and significance of project teaching method

The project teaching method emphasizes students’ active participation, autonomous inquiry learning and cooperative learning, and mobilizes students’ initiative, enthusiasm and creativity in learning. Students are the “protagonists” in the classroom, while teachers change from “protagonists” to “supporting actors”, which realizes the exchange of roles between teachers and students , virtually endowing different roles with different responsibilities, and strengthening students’ self-study ability, method abilityThe cultivation of innovation ability and other key abilities has achieved the educational effect of moistening things silently.

### 1.2 PDCA quality management cycle

PDCA quality management cycle, also known as quality ring, is a general model in social management. It was first proposed by American quality management expert Dr. Shewhart, and then popularized through the use and publicity of American quality management expert Dr. Deming, so it is also called Deming ring. Practice has proved that PDCA quality management cycle is a logical working procedure that can effectively promote any work. The working process is divided into four steps: Plan (p-plan), execute (d-do), check (c-check) and

process (a-act). P is the foundation, D is the core, C is the means, and a is the foundation. In quality management activities, it is required to plan, implement and check the implementation effect of various works according to the plan, and then incorporate the successful practices into the standard, and leave the unsuccessful ones to be solved in the next cycle . This working method is the basic method of quality management and the general rule to maintain the continuous improvement of the quality of any work.

1.3 Comparison of project teaching method, PDCA quality management cycle and PDCA project teaching mode

Improving the quality of education and teaching is the core task of secondary vocational education. PDCA quality management cycle is a scientific and successful quality management method that has been tested by years of practice . There are similarities between the project teaching method and the implementation process of PDCA quality management cycle. Through comparison, we will find that if the two are integrated, the superior will be better, the stronger will be, and even more powerful .

**Table 1 Comparison of project teaching method, PDCA cycle and integrated PDCA project teaching mode**

	Project teaching method	PDCA cycle	PDCA project teaching mode
flow	Identify projects: analyze the current situation, scientifically identify projects (teachers), and create learning situations	Plan making: analyze the current situation and causes, determine objectives, and formulate measures and plans	Project planning: analyze the current situation, determine the goal, and scientifically determine the practical teaching project.
	Making plans: student teams independently collect information, design schemes, and divide tasks for projects (students)	Implementation: specific implementation plan	Project implementation: according to the requirements of the project, students in groups independently collect information, design and implement the implementation plan.
	Implementation plan: the student group will implement the plan independently and the teacher will guide it		
	Project inspection: Students' groups independently conduct project summary and exchange, conduct process inspection according to the plan, and teachers' guidance	Inspection and evaluation: evaluate and summarize the effect of the implementation plan, analyze the advantages and disadvantages, and find out the existing problems.	Project inspection and evaluation: according to the industry and enterprise evaluation standards, carry out individual evaluation and group evaluation to find out good practices and existing problems [10].
	Project evaluation: conduct multiple evaluations of the project process and results, including students' personal evaluation, group evaluation, teacher evaluation, etc., and find out the existing problems [9].		
	Handling: handle the inspection results, affirm the successful experience, and standardize it for further follow-up; We should pay attention to the lessons of failure and find out the reasons. For unresolved problems, refer to the following PDCA cycle for solution.	Project processing improvement: process the inspection and evaluation results, affirm the successful experience, and standardize it, so as to continue to follow in the subsequent project training; We should pay attention to the lessons of failure and find out the reasons. For unsolved problems, propose to the next PDCA cycle for solution.	
characteristic	With the project as the main line, the teacher as the guide and the students as the main body, the teaching effect is evaluable and controllable, and the combination of theory and practice is emphasized.	Cycle; Big ring sets small ring, small environmental protection big ring, and promotes big cycle; Step up; The key to promote PDCA cycle is the "processing" stage; One of the four stages should not be less [11].	Keeping the characteristics of the project teaching method, and taking the "processing" stage of PDCA as the joint point, key point and driving point of the cycle chain, we established the inheritance and link between projects, ensuring the spiral rise of teaching quality [12].

**2. PDCA project teaching mode**

2.1 PDCA project teaching mode definition

The PDCA project teaching mode is based on the project teaching method, and is deeply integrated with the PDCA quality management cycle through the teaching implementation process. It not only maintains the characteristics of the project teaching method, but also establishes the inheritance and connection between projects through the evaluation and feedback improvement link of PDCA. The end of one project is the basis for the start of another project, It ensures the continuity of the continuous spiral rise of teaching quality.

2.2 The role and significance of PDCA project teaching mode

Using PDCA project teaching mode, we can achieve efficient classroom : for students, we should return the classroom to students to the

maximum extent, leave time for students, let students explore, communicate, cooperate in learning, grow, dare to ask questions, dare to think and question, and cultivate students' independent thinking ability, cooperative inquiry ability, language organization ability, and innovative thinking ability, Not only let the students' body move, but also let the students' heart and spirit mobilize; For teachers, the focus of teaching should be shifted to ensuring students' learning environment and instructing students. Teachers' energy should pay more attention to students' learning status, progress and growth, teaching methods and strategies, and teaching quality. They should become the organizers, helpers, facilitators, and monitors of students' learning process, so as to make classroom teaching truly live, Students' learning quality and growth efficiency will be improved, and classroom efficiency and classroom quality will be improved accordingly .

### 3. Application case of PDCA project teaching mode

Our school attaches great importance to the role of skills competition in "setting up a flag, navigation, calibration and catalysis" of vocational education. Over the years, in the process of guiding students' practical training and preparation training, in order to improve the quality of education and training in a limited time, we gradually practice and summarize the PDCA project teaching mode.

The project design of the national vocational college skills competition is closely connected with the international and domestic skills standards, the advanced technology of industrial enterprises, and the competition project is designed according to the real working process, tasks and requirements. On this basis, we carefully select, design and process. A large project can be disassembled into several small projects or tasks, which is more conducive to the implementation of skill teaching. We started with basic small projects and tasks, and entered the growth cycle mode through four steps of PDCA project teaching mode. We use this mode flexibly in routine training and preparation training. The four stages of pre competition training are: first, analyze the current situation of the stage, create an equal, interesting and harmonious teaching environment, carefully plan training projects, and seriously formulate training plans and measures; Second, carry out project (task) training according to the plan, and fully mobilize the enthusiasm and initiative of students through group exploration and practice and active participation, so as to learn by doing and help; Third, the students' learning motivation is stimulated to the maximum extent by testing and evaluating through simulated competitions; Fourth, summarize the project in various forms to guide students to deepen their understanding and experience; The fourth step is particularly important. Through reviewing and summarizing the experience and lessons, we will standardize and guide the experience and good practices, find out the existing problems, and find out the methods and measures to solve the problems. The problems that have not been solved in time and the new problems that have arisen will be incorporated into the planning of the next cycle, thus entering the next cycle. One cycle is connected with another cycle, forming a large dynamic cycle with ladder rise. In the conventional training, the simulation competition in the third stage is less used. In the cycle of PDCA project teaching, students establish stable, efficient and dynamic learning groups. In the day-to-day competition, the practical level and professionalism are becoming more and more mature .

The teaching strategy should be paid attention to in the practical application of this mode.

In order to avoid the PDCA project teaching mode falling into the process and leading to the generation of habitual thinking, we regard PDCA project teaching as an idea rather than just a teaching mode. In the process of implementing this mode, we flexibly use the small teacher teaching method, task driven method, etc. . For example, in terms of teaching strategies, we focus on the study of students' learning methods, take students as the center, build a learning community between teachers and students, and students learn new knowledge and skills in modules and act as small teachers. We carry out the "small teacher teaching method", reduce teachers' speaking, and increase "small teachers' speaking, doing, and demonstrating. Only by telling others clearly can we truly learn, The instructors provide more help in solving learning resources and difficulties. In the learning community, teachers are also students, and students are also teachers. They return the initiative of learning to students, fully mobilize students' initiative and enthusiasm in learning, and enable students to understand and master knowledge more fully; In the process of project implementation, we also pay attention to the cultivation of students' scientific thinking modes such as reverse thinking, overall thinking and double thinking, which improves students' thinking ability, flexible ability to deal with problems, cultivates students' self-confidence, and builds a student-centered teaching ecology.

PDCA project teaching mode ensures that teachers' and students' energy can be used in the right place. By coping with various new situations and changes, we can find the blind spots in students' training at any time and guide students to solve them step by step, so as to provide innovative power and vitality guarantee for improving the efficiency of practical training teaching, It ensures that our school leads the way in the national vocational college skills competition, and more and more top-notch skilled talents and Qilu craftsman reserve talents grow up!Practice has proved that PDCA project teaching mode has its unique advantages in the talent training of modern vocational education. Today, with the high-quality development of vocational education, we should further practice and innovate, enrich the teaching mode, constantly summarize and improve, vigorously try and promote, and better serve the high-quality development of education and the national modernization.

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# Research on Farmers' Ideological and Political Education under the background of Rural Revitalization

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**Abstract:** in order to implement the Rural Revitalization and development strategy proposed by the state, it is necessary to organize farmers to carry out ideological and political education, which can not only open up the mass line, but also promote economic development. Based on this, before carrying out the ideological and political education for farmers, the local government should first make a comprehensive analysis of the background and the main body of the work, and combine the instrumental and educational characteristics of this work to build a practical mode of Ideological and political education for farmers. In addition, the government and educational institutions should deeply analyze many problems existing in the existing working mode, so as to put forward corresponding countermeasures on this basis, and finally take effective measures to optimize the effectiveness of farmers' Ideological and political education, and lay a solid foundation for the comprehensive implementation of the Rural Revitalization Strategy.

**Key words:** Rural Revitalization; Farmers; Ideological and political; Educational research

## Introduction

After the issue of rural farmers raised at the 19th National Congress of the Communist Party of China, the 20th National Congress of the Communist Party of China reiterated and emphasized again, put forward specific requirements for the implementation of the Rural Revitalization Strategy, and provided a clear direction for the ideological and political education of farmers, so as to effectively ensure the smooth development of the ideological and political education of farmers. Under the background of Rural Revitalization Strategy, local governments should grasp the Rural Revitalization Strategy, provide opportunities and platforms for farmers' Ideological and political education, so as to deepen farmers' Ideological and political education, which can not only meet the needs of rural revitalization, but also improve the ideological and political education system, and ultimately achieve good results. In addition, effectively promoting the implementation of the Rural Revitalization Strategy is an important way and content to deal with the issues of "agriculture, rural areas and farmers". The Rural Revitalization Strategy provides a clear direction for rural development, and also provides new ideas for rural development. In order to achieve the above development goals, it is necessary to vigorously carry out the ideological and political education of farmers, so as to promote the rural strategy according to the action guide, Finally, it can effectively promote the development of rural economy.

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